# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# **Compact Wireless LAN Module with Integrated Antenna**

## BP3595



# Providing wireless LAN communication in a smaller form factor

#### Product Outline

The BP3595 is our newest wireless LAN module that delivers the same functionality as the BP3591 (IEEE802.11b/g/n-compliant type with antenna) but in a smaller size. Features include software compatibility with both the BP3591 and BP3599, making it possible to take advantage of previous development assets, an optimized antenna configuration that eliminates the need for high-frequency designs, and Japan Radio Law certification, enabling immediate operation after embedding in customer applications. In addition, the compact form factor contributes to set miniaturization.

### Maintains functionality in a smaller size



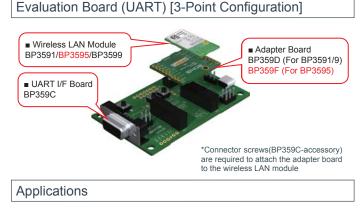
Features the same functions as the BP3591 (IEEE802.11b/g/n-compliant wireless LAN module with built-in antenna) but in a more compact size \*The BP3595 is not compatible with external antennas

## Specifications (BP3595)

| Wireless LAN Standards  | IEEE802.11b, IEEE802.11g<br>IEEE802.11n, IEEE802.11i |
|-------------------------|--|
| Host I/F                | UART (921600bps)                                     |
|                         | SDIO Ver. 2.00 (High-Speed Mode)                     |
|                         | USB2.0 (High-Speed Mode)                             |
| Communication Frequency | 2,400MHz to 2,483.5MHz (Ch1 to Ch13)                 |
| Transmission Power      | IEEE802.11b: 15dBm±2dB                               |
|                         | IEEE802.11g: 13dBm±2dB                               |
|                         | IEEE802.11n: 12dBm±2dB                               |
| Communication Rate      | IEEE802.11b: 1 to 11Mbps                             |
|                         | IEEE802.11g: 6 to 54Mbps                             |
|                         | IEEE802.11n: 6.5 to 72.2Mbps                         |
| Access Method           | CSMA/CA  |
| Access Mode             | Infrastructure/Ad-hoc                                |
| Security                | 64bit/128bit WEP, TKIP, AES                          |
| Supply Voltage          | 3.3V   |
| Current Consumption     | Continuous Data Transmission: 300mA Typ.             |
|                         | Receiving: 200mA Typ.                                |
|                         | Sleep: 1mA Typ.                                      |
| Operating Environment   | Temp: -40°C to +85°C                                 |
|                         | Humidity: <85% (No condensation)                     |

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#### BP3599 Flash Memory (Firmware Storage) BP3595 BP3591 Internal Antenna BP3580 OSC IDO 3.3V **BB/MAC** RF I DO HOST MCU EEPROM \_\_\_\_\_



- AV/industrial equipment, sensor/home networks
- Wireless LAN routers and network devices
- Smartphones and connected peripherals
- Products and systems that cannot provide wireless LAN functionality due to insufficient MCU capability or prohibitive development costs

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## Wireless LAN module lineup